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Phe Leu Pro Leu Leu Pro Arg Leu Lys Gln Ser Val Asp Lys Tyr Tyr
370 375 380

Pro Gly Thr Lys Leu Ala Leu Thr Glu Tyr Ser Tyr Gly Gly Glu Asn
385 390 395 400

Asp Ile Ser Gly Gly Ile Ala Met Ala Asp Val Leu Gly Ile Leu Gly
405 410 415

Lys Asn Asp Val Tyr Met Ala Asn Tyr Trp Lys Leu Lys Asp Gly Ala
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Asn Asn Tyr Val Ser Ala Ala Tyr Lys Leu Tyr Arg Asn Tyr Asp Gly
435 440 445

Lys Ser Ser Thr Phe Gly Asp Ile Ser Val His Ala Gln Thr Ser Asp
450 455 460

Ile Val Asn Ser Ser Val His Ala Ser Val Thr Asp Ala Ser Tyr Lys
465 470 475 480

Glu Leu His Leu Val Val Met Asn Lys Ser Met Asp Ser Ala Phe Asp
485 490 495

Ala Gln Phe Asp Leu Ser Gly Glu Thr Thr Tyr Gly Ser Gly Lys Val
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Trp Gly Phe Asp Lys Asn Ser Ser Gln Ile Lys Glu Ala Ala Pro Ile
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Thr Gln Ile Ser Gly Asn Arg Phe Thr Tyr Thr Val Pro Pro Leu Thr
530 535 540

Ala Tyr His Ile Val Leu Thr Ala Gly Asn Asp Thr Pro Val Glu Asn
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Pro Glu Ser Phe Ala Leu Arg Ala Glu Ala Gly Asp Gly Lys Ser Ile
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Tyr Leu Asp Ala Ser Ser Gly Val Val Gly Tyr Ser Val Gln Arg Ala
580 585 590

Thr Tyr Glu Asn Gly Pro Phe Ala Ala Val Ala Ser Asn Leu Val Glu
595 600 605

Thr Ser Tyr Thr Asp Thr Asn Val Thr Asn Gly Thr Ser Tyr Tyr Tyr
610 615 620

Lys Ile Thr Ala Lys Thr Lys Thr Gly Thr Ser Ala Ser Asn Val Leu
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Lys Ala Val Pro Arg Ala Pro Val Asp Gly Pro Asp Arg Tyr Glu Ala
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Glu Asp Gly Thr Leu Lys Gly Thr Val Val Glu Ser Ser Gly Thr Gly
660 665 670

Phe Ser Gly Thr Gly Tyr Val Thr Asn Phe His Asn Ala Gly Asp Ser
675 680 685

Leu Thr Met Thr Ile Gln Ala Pro Thr Ala Gly Leu Tyr Asn Leu Thr
690 695 700

Ile Gly Tyr Arg Ser Pro His Asp Asp Lys Arg Thr Asn Phe Ser Leu
705 710 715 720

Asn Gly Lys Ala Ser Gly Glu Leu Val Leu Trp Lys Thr Ala Asp Phe
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 Lys Glu Thr Ser Gly Gly Lys Val Leu Leu Asn Ala Gly Ala Asn Thr
 740 745 750
 Ile Gly Phe Glu Thr Gly Trp Gly Trp Tyr Asp Ile Asp Tyr Val Lys
 755 760 765
 Leu Glu Pro Ala Ala Asp Arg Pro Pro His Ala Val Thr Lys Thr Leu
 770 775 780
 Ile Asn Pro Asn Ala Thr Val Glu Ala Lys Ala Leu Met Asn Tyr Leu
 785 790 795 800
 Val Asp Gln Tyr Gly Lys Asn Met Leu Ser Gly Gln Glu Asp Met Pro
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 Glu Ile Asp Trp Leu Gln Ala Asn Val Gly Lys Lys Pro Ala Ile Ala
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 Ala Leu Asp Leu Ile Asp Tyr Ser Pro Ser Arg Ala Glu His Gly Leu
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 Ser Ser Thr Glu Thr Glu Lys Ala Ile Glu Trp Asp Lys Gln Gly Gly
 850 855 860
 Ile Val Thr Phe Ala Trp His Trp Asn Ala Pro Lys Gly Leu Ile Asp
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 Thr Gln Gly Lys Glu Trp Trp Arg Gly Phe Tyr Ala Asp Ser Thr Thr
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 Phe Asp Ile Glu Tyr Ala Met Asn His Pro Glu Ser Glu Asp Tyr Lys
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 Leu Leu Ile Arg Asp Ile Asp Val Ile Ala Gly Gln Leu Lys Lys Leu
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 Gln Asp Ala Lys Val Pro Val Leu Phe Arg Pro Leu His Glu Ala Glu
 930 935 940
 Gly Lys Trp Phe Trp Trp Gly Ala Lys Gly Pro Glu Pro Val Lys Lys
 945 950 955 960
 Leu Tyr Ile Leu Met His Asp Arg Leu Thr Asn Val His Lys Leu Asn
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 Asn Leu Ile Trp Val Trp Asn Ser Val Ala Pro Asp Trp Tyr Pro Gly
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 Asp Glu Tyr Val Asp Ile Leu Ser Phe Asp Ser Tyr Pro Gln Ala Gly
 995 1000 1005
 Asp Tyr Ser Pro Gln Ile Ala Lys Tyr Glu Asp Leu Val Thr Leu Gly
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Lys Asp Lys Lys Leu Val Cys His Glu Arg Lys Arg Thr Tyr Pro Gly
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Pro Gly Ser Asp Glu Gly Val Ser Ser Pro Leu Glu Leu Val Arg Tyr
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Met Val Trp Gly Phe Leu Glu Arg Arg Gln Thr Lys Gln Ser Leu Glu
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His Leu Lys Lys Val Tyr Asn His Pro Asn Val Ile Thr Leu Glu Lys
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Leu Pro Thr Asn Leu Lys Thr Tyr Gly Ile Thr Glu Gln Pro Ser Val
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Pro Gly Ser Phe Thr Leu Asn Ala Ala Gly Glu Thr Ala Lys Val Lys
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Leu Ser Trp Thr Ala Ser Ala Asn Ala Ala Ser Tyr Glu Val Lys Arg
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Ser Thr Val Glu Asn Gly Ala Phe Ala Thr Val Ala Ser Asp Val Tyr
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Gly Ser Ser Tyr Thr Asp Thr Ala Val Thr Ala Asp Thr Thr Tyr Tyr
1155 1160 1165

Tyr Gln Val Val Ala Lys Asn Asp Ala Gly Gln Thr Val Ser Asn Thr
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Ala Ser Ala Ala Pro Lys Ala Asp Thr Gln Gln Pro Thr Thr Gly Leu
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Val Leu Gln Tyr Arg Thr Ala Asp Thr Asn Val Asn Asp Asn His Leu
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Asn Pro His Phe Gln Ile Leu Asn Lys Gly Thr Ile Ser Val Pro Ile
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Asn Glu Leu Lys Ile Arg Tyr Tyr Tyr Thr Ile Asp Gly Asp Arg Glu
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Gln Thr Phe Asn Cys Asp Tyr Ala Val Leu Ser Cys Ser Lys Leu Asn
1250 1255 1260

Gly Lys Leu Val Lys Met Asp Lys Ala Ala Thr Gly Ala Asp Tyr Tyr
1265 1270 1275 1280

Leu Glu Val Ser Phe Asn Ser Asp Ala Gly Val Leu Ala Ser Gly Gly
1285 1290 1295

Ser Thr Gly Gly Ile Gln Thr Arg Ile His Lys Ala Asp Trp Ser Asn
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Tyr Asn Glu Ser Asp Asp Tyr Ser Tyr Lys Gly Thr Gln Thr Ser Phe
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 35 40 45
 Val Asp Thr Ser Lys Asp Arg Lys Pro Ile Ser Pro Tyr Ile Tyr Gly
 50 55 60
 Thr Asn Gln Asp Leu Ala Gly Asp Glu Asn Leu Ala Ala Arg Arg Leu
 65 70 75 80
 Gly Gly Asn Arg Met Thr Gly Tyr Asn Trp Glu Asn Asn Met Ser Asn
 85 90 95
 Ala Gly Ser Asp Trp Gln Gln Ser Ser Asp Asn Phe Leu Cys Asn Asn
 100 105 110
 Gly Gly Leu Thr Lys Ala Glu Cys Glu Lys Pro Gly Ala Val Thr Thr
 115 120 125
 Ser Phe His Asp Gln Ser Leu Lys Leu Gly Ala Tyr Ser Leu Val Thr
 130 135 140
 Leu Pro Met Ala Gly Tyr Val Ala Lys Asp Gly Asn Gly Ser Val Gln
 145 150 155 160
 Glu Ser Glu Gln Ala Pro Ser Ala Arg Trp Asn Gln Val Val Asn Ala
 165 170 175
 Lys Asn Ala Pro Phe Gln Leu Gln Pro Asp Leu Asn Asp Asn Gln Val
 180 185 190
 Tyr Ala Asp Glu Phe Val Asn Phe Leu Val Lys Lys Tyr Gly Ala Ala
 195 200 205
 Ser Thr Lys Ala Gly Val Lys Gly Tyr Ala Leu Asp Asn Glu Pro Ala
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 Leu Trp Ser His Thr His Pro Arg Ile His Gly Glu Lys Val Xaa Xaa
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 260 265 270
 Xaa Xaa Phe Lys Leu His Xaa Ile Gly Thr Ser Val Lys Gly Asn Tyr
 275 280 285
 Ser Trp Phe Val Asp Tyr Tyr Leu Asp Gln Met Arg Leu Asn Ser Gln
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Ala Glu Gly Lys Arg Leu Leu Asp Val Phe Asp Val His Trp Tyr Pro
305 310 315 320

Glu Ala Met Gly Gly Gly Ile Arg Ile Thr Asn Glu Val Gly Asn Asp
325 330 335

Glu Thr Lys Lys Ala Arg Met Gln Ala Pro Arg Thr Leu Trp Asp Pro
340 345 350

Thr Tyr Lys Glu Asp Ser Trp Ile Ala Gln Trp Asn Ser Ala Phe Leu
355 360 365

Pro Leu Leu Pro Arg Leu Lys Gln Ser Val Asp Lys Tyr Tyr Pro Gly
370 375 380

Thr Lys Leu Ala Leu Thr Glu Tyr Ser Tyr Gly Gly Glu Asn Asp Ile
385 390 395 400

Ser Gly Gly Ile Ala Met Thr Asp Val Leu Gly Ile Leu Gly Lys Asn
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Asp Val Tyr Met Ala Asn Tyr Trp Lys Leu Lys Asp Gly Ala Asn Asn
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Tyr Val Ser Ala Ala Tyr Lys Leu Tyr Arg Asn Tyr Asp Gly Lys Asn
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Ala Thr Phe Gly Asp Ile Ser Val Asn Ala Gln Thr Ser Asp Ile Val
450 455 460

Asn Ser Ser Val His Ala Ser Val Thr Asp Ala Ser Tyr Lys Glu Leu
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His Leu Ile Val Met Asn Lys Ser Met Asp Ser Ala Phe Asp Ala Gln
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Phe Asp Leu Ser Gly Glu Thr Thr Tyr Ser Ser Gly Lys Ile Trp Gly
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Phe Asp Lys Asn Ser Ser Gln Ile Lys Ala Val Ala Pro Ile Thr Gln
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Ile Ser Gly Asn Arg Phe Thr Tyr Thr Val Pro Pro Leu Thr Ala Tyr
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His Ile Val Leu Thr Ala Asp Asn Asp Thr Pro Val Pro Pro Val Glu
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Asp Pro Glu Ser Phe Thr Leu Arg Ala Glu Ala Gly Asp Gly Lys Val
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Asp Leu Ser Trp Asp Ala Ser Ser Gly Val Val Gly Tyr Ser Val Gln
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Arg Ala Thr Tyr Glu Asn Gly Pro Phe Ala Ala Val Ala Ser Asn Leu
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Tyr Tyr Lys Ile Thr Ala Lys Thr Lys Ala Gly Thr Ser Glu Ser Asn
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Val Leu Lys Ala Val Pro Arg Thr Pro Val Asp Gly Pro Asp Arg Tyr
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Glu Ala Glu Asp Gly Thr Leu Lys Gly Thr Ile Val Glu Ser Ser Gly
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Thr Gly Phe Ser Gly Thr Gly Tyr Val Thr Asn Phe His Asn Ala Gly
675 680 685

Asp Ser Leu Thr Met Thr Ile
690 695

16